

# ATLANTA ECONOMIC REVIEW

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## Authors and Articles

### DENZIL Y. CAUSEY, JR.

#### "Shoplifting—What Georgia Merchants Can Legally Do About It!"

In the case of shoplifting or suspected shoplifting the merchant has to decide what action he can legally take. Whether or not he may subject himself to civil liability will depend on the circumstances of each incident. Only through some understanding of the laws relating to shoplifting will the merchant be able to make instant decisions in a particular case. This article is a summary of what merchants can and cannot do in regard to shoplifting.

Mr. Causey is assistant professor of accounting, School of Business Administration of Georgia State College of Business Administration.

### JOHN J. CLARK ROBERT J. CLARKE

#### "Investment in Man: An Alternative Approach to Employee Health Programming"

The authors approach the subject of medical care from an "investment in man" rather than from an "insurance-centered" concept, contending that a program based on the latter concept is not true investment since it is inoperative until after economic loss due to illness is sustained. They suggest, instead, a program which considers the "whole man" and features prevention, such as that organized by the Seamen's Bank for Savings (New York) and the Grace Medical Group. The authors describe this program, pointing out its effect on employees, their morale, and improved efficiency in the company.

Dr. John Clark is administrative assistant for graduate study in business, St. John's University; Mr. Robert Clarke is personnel director of the Seamen's Bank for Savings.

### ROBERT W. ROSEN

#### "Mathematical Concepts for Marketing: Linear Programming"

In an objective analysis of linear programming as it can be applied to the solution of marketing problems, Dr. Rosen points out four aspects of problem solving in which linear programming offers unique advantages, as opposed to other forms of mathematical techniques. These are inequalities, constraints, slack variables, and iterations. The author also discusses the limitations of linear programming, with the conclusion that it and "other similar mathematical devices can offer only limited assistance to the solution of marketing problems."

Dr. Rosen is an associate professor in the School of Business Administration at the University of South Carolina. His article is essentially the paper given at the Southern Economic Association meeting in Atlanta.

### ROBERT K. GREENLEAF

#### "Management Development and Growth—A Continuous Process"

Mr. Greenleaf, stressing that individual growth of managers should be an unremitting process, gives some of the major aims of management development. He offers the business firm a number of searching questions—questions designed to provide a basis for specific action in the development of managers. Five major areas of action are suggested for developing more and better managers in a minimum period of time.

Mr. Greenleaf is director of personnel research, American Telephone and Telegraph Company. His article is adapted from "A Forward Look at Management Development," an Address on Industrial Relations, Bureau of Industrial Relations, University of Michigan, Ann Arbor.

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# SHOPLIFTING

## What Georgia Merchants Can Legally Do About It!

**Merchants lose huge sums each year to shoplifters.**

**Georgia merchants may take certain steps for their self-protection.**

**But under some circumstances they must proceed with caution.**

**Denzil Y. Causey, Jr.**

### What Merchants Can Do

1. Under the new law passed by the 1958 Georgia legislature a merchant, without incurring civil liability for false arrest or imprisonment, may detain a person if there is reasonable suspicion of shoplifting or if the detention is reasonable.

2. A merchant or private person may arrest for misdemeanors (not violations of municipal ordinances) committed in his presence or within his immediate knowledge; and, if the offense is a felony and the offender is escaping, he may arrest upon reasonable and probable grounds of suspicion.

3. If a merchant or private person acts timely, he may use reasonable force to protect himself from persons about to remove a chattel from his rightful possession.

### What Merchants Cannot Do

On the other hand, however, due to possible civil liability, there are grave dangers inherent in the merchant's attempt to catch the culprit; and, if there is mere suspicion of guilt or if guilt would be difficult to prove, the merchant should proceed cautiously.

The new Georgia law giving merchants the privilege of reasonable detention has not yet appeared in reported cases. Even if this new law would protect the merchant from liability for false arrest and false imprisonment, it is doubtful that it would provide an adequate defense to the separate torts of mistreatment of an invitee, malicious arrest, and malicious prosecution.

The following discussion first considers privileges of the merchant, including a discussion of the new law. Second, it considers Georgia cases of civil liability for mistreatment of invitees and false imprisonment.

## PRIVILEGES AND DEFENSES OF MERCHANTS

### Provisions of 1958 Georgia Acts

The Georgia Acts of 1958 give the merchant the right, without incurring liability, to detain a person on reasonable grounds of suspicion of shoplifting.

The revised Code states that in an action of false arrest or false imprisonment no recovery will be had: . . . where it is established by competent evidence that the plaintiff had so conducted himself, or behaved in such a manner, as to cause a man of reasonable prudence to believe that such plaintiff was committing the offense of shoplifting, as defined by the statute of this State, at or immediately prior to the time of such detention or arrest, or provided that the manner of such detention or

*Note: Mr. Causey is assistant professor of accounting, School of Business Administration of Georgia State College of Business Administration.*

arrest and the length of time during which such plaintiff was detained was under all circumstances reasonable.<sup>1</sup>

This new act has as yet had no reported cases concerning it. However, it seems clear that within the scope of the conditions in the act (i.e., shoplifting) probable cause is made a defense to a merchant in an action for false imprisonment.

Notwithstanding this new law, it seems clear that there are at least three situations in which the merchant would not be protected.

First, a person could bring the action as a tort for "mistreatment of invitee," which apparently is not included with the defensive provisions of the 1958 act. If the requisite elements were present the plaintiff could recover under malicious arrest or malicious prosecution.

Second, there is a question as to reasonable grounds of suspicion, which could be hard to prove.<sup>2</sup> Oklahoma has a similar law which specifies probable cause as a defense if it appears that the alleged unlawful arrest and detention were for protection of defendant's property. In an Oklahoma case defendant's employee was informed by a customer that plaintiff had been seen taking merchandise from a counter. When apprehended by police at instance of defendant, plaintiff had merchandise from the store but no items from the counter. The lower court directed a verdict for plaintiff. On appeal the court found that the evidence was sufficient to make probable cause an issue for the jury.<sup>3</sup>

Third, there is a question as to what constitutes a reasonable detention. A reasonable detention depends on the facts of each case and would also be a jury question.<sup>4</sup>

### Arrest Without Warrant

Under certain circumstances the merchant may, at his peril, detain the customer. Georgia Code § 27-211 states:

A private person may arrest an offender, if the offense is committed in his presence or within his immediate knowledge; if the offense is a felony and the offender is escaping, or attempting to escape, a private person may arrest him upon reasonable and probable grounds of suspicion.<sup>5</sup>

However, if an arrest is made without a warrant, the person arrested must be taken before an officer as soon as it is possible so that the officer can issue a warrant.

Georgia Code § 27-212 provides:

In every case of an arrest without a warrant, the person arresting shall, without delay, convey the offender before the most convenient officer authorized to receive

an affidavit and issue a warrant. No such imprisonment shall be legal beyond a reasonable time allowed for this purpose.

In the case of *Duchess Chenilles Inc. v. Masters* (discussed subsequently), it was charged that the plaintiff was held without being taken before a committing magistrate. The court stated:

As to whether or not the defendants held the plaintiff for an unreasonable time without carrying him before a committing magistrate, or whether his conduct waived such action, under the allegations of the petition, these are matters for the jury.

Thus, in Georgia the citizen is privileged to arrest for all misdemeanors<sup>6</sup> committed in his presence. However, this privilege does not extend to a municipal ordinance.<sup>7</sup>

Shoplifting of merchandise under \$50 is a misdemeanor, and \$50 or more is a felony.<sup>8</sup> Fraudulently obtaining credit (cheat and swindle) is also a misdemeanor.<sup>9</sup> A clerk<sup>10</sup> or cashier<sup>11</sup> who carries away goods entrusted to him is guilty of a felony.

### Recaption of Chattels

It seems clear that a merchant or any other person clearly has the right to protect himself from persons about to remove a chattel from his rightful immediate possession if he acts timely and does not use excessive force.<sup>12</sup>

## SITUATIONS OF POSSIBLE LIABILITY

### Mistreatment of Customer

A Mrs. Mobley went into a department store in LaGrange, Georgia, operated as a partnership under the name of "Mansour's Department Store" for the purpose of doing business as an invitee and customer. While choosing merchandise to buy in the women's dress department she was shouted at by defendant George Mansour, one of the three partners in the business, and was then led through a crowd of people by the defendant and his employee. Plaintiff was questioned by defendant in the stockroom while the employee guarded the only door. Plaintiff was called a common thief, a shoplifter, and accused of the crime of larceny. She voluntarily offered her handbag for search and nothing belonging to defendant was found.

The court held:

... the action was not one based on slander and false imprisonment but was based on the tortious misconduct or mistreatment of the plaintiff, an invitee, by one of the defendants acting on behalf of himself and as agent of the other two defendants.<sup>13</sup>

<sup>1</sup>Georgia Acts of 1958, p. 693, Georgia Code § 105-1005.

<sup>2</sup>35 C.J.S., False Imprisonment, § 25.

<sup>3</sup>J. C. Penney Co. v. O'Daniell, 263 F.2d 849 (1959).

<sup>4</sup>35 C.J.S., False Imprisonment, § 31 n. 24.

<sup>5</sup>According to the Restatement of The Law of Torts, American Law Institute, 1934, § 119, a citizen may arrest without a warrant if a felony has been committed and if the person arrested has committed it, or there is reasonable suspicion that he committed it. Under the Georgia Act, the felon who is attempting to escape may be arrested on suspicion only.

<sup>6</sup>Delegal v. State, 109 Ga. 518, 35 S. E. 103 (1899).

<sup>7</sup>Graham v. State, 143 Ga. 440, 85 S. E. 328 (1915).

<sup>8</sup>Georgia Code § 26-2642.

<sup>9</sup>Georgia Code § 26-7401.

<sup>10</sup>Georgia Code § 26-2808.

<sup>11</sup>60 App. 719, 4 S. E. 2d 922.

<sup>12</sup>Restatement of The Law of Torts, § 100-106.

<sup>13</sup>Mansour v. Mobley, 96 Ga. App. 812, 101 S. E. 2d 786 (1957).

The court cited, among other cases, *Simpson v. Jacobs Pharmacy Company*,<sup>14</sup> in which a customer presented a \$10 bill and received change for a \$1 bill. The customer complained and was accused of attempting to cheat and swindle. The petition also alleged assault, humiliation, and embarrassment. When holding that the Simpson petition was good against general demurrers the court said:

While a corporation is not liable for slanderous and defamatory utterances by one of its agents, where not ordered and directed by it, even though spoken by such agent within the scope of his duties and for the benefit of the corporation [citations omitted], the present case is not one against a corporation for slander, but is one against the corporation for failure to exercise due care to protect its customers from the tortious misconduct of its servants and employees acting within the scope of and about their master's business. The fact that such misconduct may involve elements of slander does not prevent the plaintiff from having a cause of action against the corporation for breach of its duty toward her as an invitee on its premises.<sup>15</sup>

This rule was also stated in *Colonial Stores Incorporated v. Coker*.<sup>16</sup>

A store's duty to protect an invitee from misconduct of employees was set forth in *Jacobs v. Owens*.<sup>17</sup> In this case the defendant's employee "called the Atlanta Police Department and notified them that a man was holding a gun on one of the employees and asked that the police be sent right away; the police came and as they entered Mrs. Jacobs pointed to the plaintiff and in effect said 'That's the man.'" Plaintiff was merely waiting for packages to be wrapped and as a result of the pointing out he was searched by police as a common criminal. Defendant contended he was not liable because he only summoned the police and did not request a search. The court overruled defendant's demurrer and held that the above was tantamount to direction of arrest and that direction need not be in express terms. The court also noted a cause of action based on failure to protect the plaintiff as a customer.

### False Imprisonment

At common law and under Georgia Code § 105-901, false imprisonment consists in the unlawful detention of the person of another, for any length of time, whereby he is deprived of this personal liberty.

In *Duchess Chenilles Inc. v. Masters*,<sup>18</sup> plaintiff had

<sup>14</sup>*Simpson v. Jacobs Pharmacy, Inc.*, 76 Ga. App. 232, 45 S. E. 2d 678 (1947).

<sup>15</sup>Georgia follows the minority rule, making a distinction between slander (oral) and libel (written) and holds that a corporation is "not liable for a slander spoken by its officer or agent, even though he is acting for the benefit of the corporation and within the scope of his authority, if the corporation had not expressly directed or authorized him to speak the words in question or subsequently ratified them." *Am. Jur. Corporations*, § 1128; *Behre v. National Cash Register Co.*, 100 Ga. 213.

<sup>16</sup>*Colonial Stores, Inc. v. Coker*, 74 Ga. App. 264, 39 S. E. 2d 429.

<sup>17</sup>*Jacobs v. Owens*, 96 Ga. App. 318, 99 S. E. 2d 895 (1957).

<sup>18</sup>*Duchess Chenilles Inc. v. Masters*, 84 Ga. App. 822, 67 S. E. 2d 600 (1951).

been moving trash at request of a foreman and others and was arrested by police of city of Dalton for stealing goods, but after plaintiff paid defendants \$100 he was released. The court quoted from *Piedmont Hotel Co. v. Henderson*:

Whoever arrests or imprisons a person without a warrant is guilty of a tort, unless he can justify under some of the exceptions in which arrest and imprisonment without a warrant are permitted by law; the burden of proving the existence of the facts raising the exception is upon the person making the arrest or inflicting the imprisonment.<sup>19</sup>

The person instigating arrest may be held liable in false imprisonment.

In cases in which the defendant is shown to have called the police for protection or to keep the peace, the defendant's liability for a resulting arrest by the officer, without warrant, of a disturber at the scene turns on the question whether the arrest was made by the officer of his own motion and upon his own judgment or was made at the instigation of the defendant. It is not enough to show merely that the defendant caused the officer's presence by his complaint or that the arrest was made in his presence and for his benefit.<sup>20</sup>

In *Conoly v. Imperial Tobacco Co.*<sup>21</sup> the company manager found a lock broken, went to a local schoolhouse accompanied by an officer, and accused several boys of breaking a lock and stealing. The manager (directed by officer) then caused the boys to be placed in his automobile and carried to their fathers' places of employment to get them to admit the offense, and again accused them of burglary. The plaintiff requested that his son be released, which defendant refused to do. No warrant had been issued for the arrest and no crime had been committed in the presence of either the manager or the officer. After an hour's time, the boy was released and no charges were filed against him.

An action for damages for false arrest and false imprisonment was brought against the store manager, who denied liability.

The jury decided in favor of the defendant. However, the court of appeals ruled that the lower court had been in error in denying a new trial, stating that the police officer had acted as agent of the defendant and that, as a matter of law, the verdict would be in favor of the plaintiff.

In *Hill v. Henry*<sup>22</sup> the court stated: "Where, as in the instant case, a private person causes an officer to arrest another illegally without a warrant, he is liable in an action for false imprisonment to the person thus arrested."

Perhaps the best Georgia case dealing with this question is that of *Webb v. Prince*,<sup>23</sup> in which it ap-

<sup>19</sup>*Piedmont Hotel Co. v. Henderson*, 9 Ga. App. 672, 78 S. E. 482.

<sup>20</sup>21 ALR 2d 697, Annotation.

<sup>21</sup>*Conoly v. Imperial Tobacco Co.*, 63 Ga. App. 881, 12 S. E. 2d 398 (1940).

<sup>22</sup>*Hill v. Henry*, 90 Ga. App. 93, 82 S. E. 2d 35 (1954).

<sup>23</sup>*Webb v. Prince*, 62 Ga. App. 749, 9 S. E. 2d 675 (1940).

peared that an invitee in a restaurant in Augusta, Georgia, attempted to cash a check. Shortly thereafter, at the request of the defendant's employees, officers arrived and would not even listen to plaintiff's story but arrested her. Although the court held that the arrest was at instigation of the defendant, it set forth the following:

Therefore one who actively instigates or procures an arrest, without lawful process, is generally regarded as the principal for whom the officer acts, and may be held to respond in damages. But one who merely states to an officer what he knows of a supposed offense, even though he expresses the opinion there is ground for the arrest, but without making any charge or requesting an arrest does not thereby make himself liable for false imprisonment. However maliciously and without probable cause the defendant may act in reporting to an officer facts which justify an arrest, if the arrest is made without his command, request, or direction, he is not liable. The mere fact that he asked that the law be enforced, without assuming and declaring or directing the precise procedure by the officer, will not make him liable.

In *Sinclair Refining Company v. Meek* the court quoted a Georgia Supreme Court decision:

False imprisonment at common law, and elsewhere, consists in the unlawful detention of the person of another, for any length of time whereby he is deprived of his personal liberty [citations omitted] and furnishes a right of action for damages to the person so detained. The only essential elements of the action being the detention and its unlawfulness [citations omitted], malice and the want of probable cause need not be shown.<sup>24</sup>

### Acts of Agent

The merchant can be held responsible for the acts of his agent if performed within the scope of employment.

In *Turney v. Rhodes*<sup>25</sup> it was held that an operator of an elevator acted within the scope of his employment in refusing to permit a person in an elevator to leave it, and that a good cause of action was made out against the principal for illegal restraint.

Private corporations may be held liable for false imprisonment when the agent or employee acted within authority given or in the scope of his employment.<sup>26</sup>

Generally, managers and partners have authority which will bind their principals.

In *Rogers v. Sears, Roebuck & Co.*<sup>27</sup> the store proprietor was held not liable where the clerk had been instructed never to accuse or arrest a customer and the manager had promptly secured the plaintiff's release.

### Malicious Prosecution and Arrest

Malicious prosecution is more difficult to prove than false imprisonment because it is necessary to show want of probable cause.<sup>28</sup> As demonstrated by the case below,

there also must be a valid warrant and an acquittal of the plaintiff.

In *Godfrey v. Home Stores, Inc.*<sup>29</sup> the plaintiff presented a check drawn by another party to be cashed and was detained until police arrived. The defendant procured a warrant for arrest of plaintiff for being a common cheat and swindler. The case was dismissed. Plaintiff brought malicious prosecution and obtained a default judgment. The court of appeals in assigning error to the reopening of default held that: "It is true that to support an action for malicious prosecution there must be a valid warrant. [Citations omitted.] If the warrant is void the action will lie for false imprisonment." The court, quoting a previous case, also stated:

The malice contemplated by law in an action for malicious prosecution is the same as in an action for malicious arrest, and may consist in personal spite or in a general disregard of the right consideration of mankind, directed by chance against the individual.<sup>30</sup>

According to the court, the test for want of probable cause is whether the prosecutor had "... reasonable belief that there was probable cause for prosecution."<sup>31</sup>

The Georgia Code sets out malicious arrest as giving rise to a cause of action separate from false imprisonment. Georgia Code § 105-1001 states: "An arrest under process of law, without probable cause, when made maliciously, shall give a right of action to the party arrested." It is further stated in Code § 105-1003:

Want of probable cause shall be a question for the jury, under the direction of the court, and shall exist when the circumstances are such as to justify a reasonable man that the accuser had no ground for proceeding but his desire to injure the accused.

### CONCLUSION

Although the new Georgia law gives the merchant the privilege of detaining a person on *reasonable* suspicion of shoplifting or if the detention is *reasonable*, this law has not yet been interpreted by the courts, and the interpretation of "reasonable" may be an issue for the jury where questions of fact are to be decided. Even if the detention is declared to be reasonable, and there is no liability for false arrest or imprisonment, the merchant may be open to charges for the separate tort of mistreatment of the customer in his store. If there was not probable cause for the merchant's acts he may, in certain circumstances, be open to charges of malicious arrest or malicious prosecution.

The word "reasonable" appears throughout legally-stated protective measures for the merchant. And if there is mere suspicion of guilt or guilt would be difficult to prove, merchants should proceed cautiously. Each case presents a different set of circumstances.

<sup>24</sup>*Sinclair Refining Company v. Meek*, 62 Ga. App. 850, 10 S. E. 2d 76 (1940).

<sup>25</sup>*Turney v. Rhodes*, 42 Ga. App. 104, 155 S. E. 112 (1930).

<sup>26</sup>13 Am. Jur. Corporations § 1123, § 1126, § 1127.

<sup>27</sup>*Rogers v. Sears Roebuck & Co.*, 297 P. 2d 250 (1956).

<sup>28</sup>Prosser, William L., *Law of Torts*, 1955, West Publishing Company, p. 645.

<sup>29</sup>*Godfrey v. Home Stores, Inc.*, 101 Ga. App. 269, 114 S. E. 2d 202 (1960).

<sup>30</sup>*Darnell v. Shirley*, 31 Ga. App. 764, 122 S. E. 252.

<sup>31</sup>*Godfrey v. Home Stores, Inc.*, supra.

# INVESTMENT IN MAN: an alternative approach to employee health programming

*Last month the Atlanta Economic Review presented an article on medical care for the aged. The article below is concerned with a company-sponsored health care program which stresses prevention. As stated in the June issue, the views expressed by the authors are not necessarily those of the Bureau of Business and Economic Research.*

Medical care has once again become a political issue, this time on the provision of medical services for the aged. As in past years, two factors characterize the debate: (1) a piece-meal or fragmented approach to the problem; (2) concentration on financing the services extended. We are, for example, much concerned with medical care for the aged; yet we are young before growing old and the problems of medical care for the below 65 age brackets have by no means been resolved. Further, the debate centers preponderantly on the availability of medical care after illness has occurred. Remarkably little attention is given to preventive medicine, despite the fact that some of our greatest gains in national health have come in this area. When we talk of financing health programs, we speak of it almost exclusively in terms of governmental obligation. The great potential of private financing is either ignored altogether or assumed limited to conventional insurance coverage. The authors feel that small progress will be made in raising the level of medical care for our citizens until we view the problem in its totality and recognize that in the nature of our politico-economic system, private enterprise has much to contribute, and indeed, an obligation to do so.

The nation's health therefore is a medical, economic, and management problem. It is a medical problem which should embrace the broadest concept of health, the physical and mental welfare of the employee, rather than concentration on a narrow therapeutic medicine. As an economic problem, it involves questions of the optimal allocation of resources. In this connection, it is well to remember that we are not free to envisage the saving of resources by lowering the quality of medical care. Less than the highest quality may represent total

waste of resources. Finally, where private industry is involved, the firm's health plan must be integrated with the over-all personnel policy of the firm, for it will both affect and be affected by the operation of that policy.

## INSURED HOSPITALIZATION PROGRAMS

Extant industrial health programs typically take the form of some combination of Blue Cross-Blue Shield or major medical coverage. Focusing on insurance rather than on people, these plans are more often than not proffered to employees either as a magnanimous gesture on the part of management or merely as an effort "to keep up with the Joneses" in the matter of fringe benefits. Rarely does management view the health program as an integrated part of a personnel policy striving for the maximum development of the employee's potential for the benefit of himself and the company.

Experience testifies that insurance policies, however combined, cannot in themselves constitute an adequate employee health program. The present debate on medical care for the aged has at least resulted in a more or less general agreement on the following points:

## Overutilization of Hospital Facilities

Insured hospitalization, the product of the depression-ridden Thirties, assumes the existence of idle manpower and facilities. Its initial purpose was to assist hospitals in financial distress to fill empty beds by enabling patients to amortize the costs of hospitalization over their working lives. Today we encounter the opposite problem, that of overutilization of hospital facilities accentuated by the admission of patients with trivial ailments solely because they are insured.<sup>1</sup>

The hospital utilization rate, which has a crucial effect on the cost of hospital insurance and which has been accelerating at a disturbing pace, can be kept within insurable bounds without artificial restrictions or damage to medical care, by avoiding the present built-in incentives for non-essential utilization. Health insurance enrollees with comprehensive coverage utilize only 60-80 per cent as many hospital days as those with hospital-surgical coverage only. The comprehensive plans have demonstrated that the present distorted 2 to 1 ratio of

Note: Dr. John Clark is administrative assistant for graduate study in business, St. John's University; Mr. Robert Clarke is personnel director of the Seamen's Bank for Savings.

<sup>1</sup>See *An Opinion Study of Prepaid Medical Care Coverage in Michigan* by the Michigan State Medical Society, 1957; also William Haber and Wilbur J. Cohen, *Social Security* (Homewood, Ill.: R. D. Irwin, 1960), pp. 362-363.

hospital to medical insurance expenditures can be substantially reversed. If the minority pattern could be generalized, the problem of hospital insurance costs might be solved on a voluntary basis, while simultaneously serving other desirable objectives, e.g., more prevention and rehabilitation.<sup>2</sup>

### Rising Costs

Insured hospitalization premiums will increase with the cost of medical care.

The cost of medical care more or less paralleled the rising cost of living in the early postwar years. After 1951, however, cost of medical care rose much faster than the over-all cost of living and now the cost of medical care is 44 per cent above the 1947-1949 base, in contrast with the consumer price index, which is 23 per cent above the base. Moreover, it is somewhat disturbing that the rising cost of medical care shows no signs whatsoever of letting up despite the fact that it costs \$1.44 to buy medical care that cost only a dollar a mere decade ago.<sup>3</sup>

Using 1957 as a base, New York Blue Cross rates could well increase some 50 per cent by 1962.<sup>4</sup> Blue Shield rates must certainly follow in view of growing public dissatisfaction with the unrealistic schedule of physicians allowances. Major medical policies represent added costs incurred to offset the limitations of the Blue Cross-Blue Shield combination. In short, by taking an insurance-centered approach to employee health programs, industry faces the prospect of an endless sequence of cost increases.

### Lack of Office or Outpatient Coverage

The conventional health insurance plan permits little in the way of office and outpatient therapy. Providing every economic incentive for the physician to operate, they encourage a surgical treatment of many complaints but offer little incentive to take full advantage of the latest biomedical advances.<sup>5</sup>

Dr. George Wheatley, vice-president, Metropolitan Life Insurance Company, quotes with approval this statement by another doctor, "I think an insurance policy sold without office or out-patient coverage is a greater cause of abuse and increased cost than any other single factor."<sup>6</sup>

### Emphasis on Therapy Rather than on Prevention

Few employee health programs today give realistic scope to the practice of preventive medicine. Nearly all plans stress treatment after the occurrence of illness. The rising curve of health insurance costs will obvi-

ously not be reversed until we reduce the incidence of illness by satisfactory programs of prevention. Unless industry faces squarely the issue of preventive medicine, it will shuffle from one insurance scheme to another in a vain attempt to stabilize costs.

### Penalties of Retirement

While the problem of financing health insurance premiums during the working life of the employee is not an easy one, it is at least manageable. A regular paycheck facilitates budgeting, and in many instances management accepts the burden in whole or in part. Under present arrangements, Blue Cross-Blue Shield policies remain in force after retirement; however, the employee must then assume the full burden of premium payments. The financial burden thus increases concomitantly with the decline in income. Needless to remark, the post-retirement group is also the high cost, high risk group.

Investment is the productive employment of capital with the primary purpose of receiving a return. Thus expenditures on plant and equipment are expected to yield tangible economic rewards to the investing company. May we not apply this concept to expenditures on employee health programs? Is it unrealistic to conceive of these expenditures as an "investment in man" equally capable of yielding tangible economic benefits to the firm through enhanced productivity, fewer loss-time illnesses, and improved morale? Insurance-centered schemes do not qualify as true investments for they become operative only after economic loss due to illness has been sustained. The inability of insured hospitalization to meet the multifaceted challenges implied by the "investment in man" concept should encourage exploration of new avenues of approach. One such alternative has been successfully organized by The Seamen's Bank for Savings (N.Y.) and the Grace Medical Group.

### THE SEAMEN'S COMPREHENSIVE MEDICAL PLAN

#### The Seamen's Bank for Savings

Even in an industry where age is frequently a criterion of respectability, *The Seamen's Bank* is a venerable institution. The bank, now the 13th largest mutual savings bank in the United States with deposits of \$495,000,000, opened its doors on May 11, 1829; and thus originated the idea of a savings bank for seamen sponsored in part by the *Bethel Union* and the *Society for Promoting the Gospel Among Seamen in the Port of New York*.<sup>7</sup> In 1833, the bank's services were extended to the community at large, and today members of the maritime trades constitute only 15 per cent of the bank's depositors.

<sup>7</sup>Clarence G. Michalis, "Seamen's Bank 125 Years in Step with New York," Address to Newcomen Society in North America, January 6, 1954.

<sup>2</sup>Herman M. and Anne R. Somers, "Private Health Insurance: Problems, Pressures, and Prospects," quoted in Haber and Cohen, *ibid.*, p. 383.

<sup>3</sup>"Health Isn't Free," Federal Reserve Bank of Philadelphia, *Business Review* (December, 1958).

<sup>4</sup>*Newsweek*, July 4, 1960.

<sup>5</sup>*New York Times*, May 31, 1959; Edwin J. Grace, "Keep Your Employees Out of the Hospital," *Harvard Business Review* (September-October, 1959), pp. 119-126.

<sup>6</sup>Federal Reserve Bank of Philadelphia, *op. cit.*

## **Institutional Background of the Seamen's Comprehensive Medical Plan**

Evaluation of the Seamen's Comprehensive Medical Plan requires consideration of two factors: first, the changing function of the business enterprise, and secondly, the bank's philosophy of management.

The Seamen's Bank for Savings, employing some 250 men and women, is small as corporate organizations go, but well illustrates the reciprocal effect of social change upon the business firm. Over the 131 year history of the Seamen's Bank, one can trace the profound evolution in the function of the work situation for the employee. In an earlier period, the place of employment was one of many institutions which together served to define the function and significance of the individual. Today, however, the business firm is asked to provide an environment where the employee can find many of the satisfactions previously offered by other institutions. Thus the medical plan at Seamen's must be viewed as part of an integrated personnel program embracing educational benefits, life insurance, pension plan, and social activities.

The Seamen's management does not view these programs as merely "fringe benefits," for in modern industry the employee obtains his work satisfactions predominantly in terms of the social organization of the company. Co-workers and management appreciate the relative importance of his job. To the outside community the job can usually be articulated only in terms of the wages received or by the reputation of the company. The formalized components of the personnel program and the informal relationships built upon them, accordingly, contribute in great measure to the success of the medical plan by creating an atmosphere within the bank to which the employee can look for security, stability, and social participation.

The traditional solicitude of the mutual savings bank in recognizing the dignity of the individual infuses the personnel program at Seamen's. The management considers the employee as a distinct personality with his own complex of physical and intellectual abilities, emotional attitudes, and aspirations. The knowledge of management's appreciation of his contribution to the enterprise has in turn assisted the employee in adapting to the demands of the job. Equally, the reservoir of mutual confidence and goodwill, the product of the bank's philosophy of management, facilitated the organization of the Comprehensive Medical Plan. It continues to contribute to the successful functioning of the program.

## **Principles of the Seamen's Comprehensive Medical Plan**

The following basic principles constitute the conceptual framework of the Seamen's approach to employee health programming.

1. *Autonomy of the Doctor.* The bank has joined forces with an established clinic, the Grace Medical Group.<sup>8</sup> The clinic, a pioneer of group practice in the New York City area, is not a department of the bank. Housed in its own quarters, the medical group caters to the health needs of the management and employees of Seamen's as well as those of other business organizations. The physical separation of the medical group and the bank has the advantage of avoiding the "company doctor" stigma so frequently attaching to the practice of industrial medicine. In the latter case, the employee views the doctor or medical department as management and hence evades a full and frank discussion of his problem. The suspicion easily arises that the doctor shapes the diagnosis to suit the nonmedical needs of the boss.<sup>9</sup>

2. *Group Practice.* The heart of the present controversy lies in the development of service as opposed to indemnity plans. The former provides better means for quality as well as cost controls. "Group practice, either in private clinics or hospital outpatient departments, today offers the best promise of combined efficiency and quality in medical care."<sup>10</sup>

On initial examination, each employee of the bank has at least two consultants who review his problem at that time; and all necessary diagnostic tests and x-rays, including dental pictures, are made. At the employee's option, the results of these studies and consultations will be sent to his family doctor or he may elect to continue treatment at the clinic.

Inasmuch as the field of medicine is now so vast that no one physician, however talented, can encompass all of its many specialties within his range of service, all physicians to some extent depend upon the pooling of knowledge with their colleagues. On a lower level, the general practitioner who refers a difficult case to the specialist engages in a form of group practice. However, formally organized medical groups, such as the Grace Medical Group, have inherent advantages. Group practice in this framework unites the various medical specialties in a team effort to secure for the patient the fullest advantages of modern medical knowledge. In addition, at the Grace Medical Group, laboratory studies can be made promptly at the direction of the physician, considerable effort is put into the preparation of detailed case histories, and facilities are readily available for staff

<sup>8</sup>The Grace Medical Group, formerly the Grace Clinic, was founded by Dr. Edwin Grace in February 1929 and is organized for group practice along the lines pioneered by the Mayo Clinic in Rochester, Minnesota. The Medical Group continues to retain on the staff physicians trained at the Mayo Clinic.

Dr. Grace and the staff of the clinic have done outstanding work in multiple chemotherapy and in the application of genetic principles to clinical practice. Dr. Grace is the author of some sixty articles in professional medical journals, and among his many diverse activities, he is currently secretary of the International College of Surgeons.

<sup>9</sup>Ben A. Lindbergh, "Role of the Physician in Labor Relations," *A.M.A. Archives of Industrial Hygiene and Occupational Medicine*.

<sup>10</sup>Herman M. and Anne R. Somers quoted in Haber and Cohen, *op. cit.*, p. 384.

conferences. The formally organized group minimizes the danger of the GP-specialist relationship—that is, fragmentizing the patient or treating him on a per ailment basis without regard for the whole picture.

3. *The "Whole Man" Philosophy.* Within the medical group, each employee is treated as a "whole man" who spends only a part of his day at the Bank's office. His attitude toward the job is a reflection of his past, biologically and socially, his present physiology, and his environment outside of working hours. Contrariwise, in company doctor programs the inclination to look upon the worker as an economic man and to neglect his work or family environment still persists.

In any form of practice, all efforts must be bent toward solving the problems of the patient. We must consider not only the specific bodily complaint that he presents to us, but the total individual in his total environment. It is here that the dividing line between the practice of medicine and the art of medicine lies.<sup>11</sup>

Inherent in the "whole man" philosophy of the medical group is the appreciation that the individual employee's attitudes are always complex reflecting the interaction of many intangible influences. The medical group's interest therefore centers not merely on the employee's wants but also his needs, both overt and hidden. In a real sense, the medical group has a teaching function: to give the employee-patient an understanding of himself based upon a concrete physical examination and upon psychological insights utilizing his own system of relative values. Working on the patient's understanding of himself, the staff then assists him in setting a goal and following through to greater productivity. In short, by giving the patient a better understanding of his personal situation, the group assists him to correct his liabilities, either physical or psychological, and to build upon his assets—this is a significant economic function.

4. *Preventive Medicine.* The Seamen's Comprehensive Medical Plan places emphasis on prevention rather than on indemnity. The bank makes the services of the medical group available to the employee, his wife, and dependent children at all times, commencing with the pre-employment physical examination and carrying through to retirement and beyond. The reader should note that the retired employee and his wife may utilize the clinic's facilities to the end of their lives. The economic disincentive to postpone treatment or rely on self diagnosis, which in the long term results in considerable waste of medical resources, no longer exists. Although it would seem that in the absence of disincentives to treatment the medical group would be swamped by trivial complaints, this has not occurred. The factors working to maintain a balanced use of the clinic's resources lie in the informal structure of the plan and will be discussed subsequently.

<sup>11</sup>Edwin J. Grace, M.D. "The Family Doctor in Group Practice," G.P. (January, 1952), V, No. 1, 88.

5. *Family Doctor.* The family doctor concept is a key element in the Seamen's-Grace plan. In the tradition of the family doctor, the employee-patient is made to feel the concern of someone endeavoring to assist in the solution of problems affecting his physical and mental well-being. *Pari passu*, since the group's physicians work independently of management, the employee can and does approach them with the same confidence he would extend to his family doctor. Management has no access, in whole or in part, to his medical records. No details of his illness get back to the bank unless they directly affect his work situation, in which case the personnel director is advised of the pertinent medical opinions if the employee consents.

6. *Informality.* When people associate with one another over long periods of time, they tend to evolve common values and social codes which in some degree regulate the behavior of the individual members within the group. Each person in the work group experiences a pressure to conform to the group's standards. Management authorities have stressed the importance of informal groups in assisting or impeding the achievement of company objectives.<sup>12</sup>

Bank employees use the clinic on a continuous voluntary basis. As a result, over the twenty year history of the Comprehensive Medical Plan, there has developed a close personal relationship between the employees and the members of the medical staff. As far as possible, the physician has become a member of the "informal group" to which the employee belongs. The ethos of the group's relationship contributes significantly to the success of the plan and inhibits the abuse of the clinic's facilities.

7. *Democracy.* The bank makes available the services of the medical group to all personnel without regard to rank or position. From president to the porter, each employee receives the same quality and degree of attention, and all costs are billed directly to the bank.

8. *Major Medical Procedures.* Insured hospitalization has a role in the Seamen's Comprehensive Medical Plan, but one proportionate to its present capabilities and objectives. In cases where surgery or other therapy beyond the scope of the medical group is indicated, employees are referred to a hospital. A conventional major medical policy covers these hospital expenses. Although the bank absorbs the premium costs on the policy, the record will show that premiums are significantly lower than those normally charged because of the preventive factor in the medical program.

### Evaluation of the Comprehensive Medical Plan

The Seamen's Bank for Savings has pioneered in an important area of management-employee relations—

<sup>12</sup>William J. Dickson, *An Approach to the Human Factor in Work Relations*, Western Electric Company, Inc., Hawthorne Station, Chicago 23, Ill., March 4, 1943.

the integration of the employee health program with the over-all personnel policy of the firm. Its experience demonstrates that the *health protection dollar* can be the *most profitable dollar* spent in industry. Although many facets typify the personnel policy of the bank, the management feels the health program has made superior contributions in the following areas:

1. *Morale.* Within the employee group, illness has lost prestige value. The employee using illness as an excuse for absenteeism or slowing down on the job loses status with the group. With the services of the clinic freely available to all, the ground is cut from under the malingerer. To state the matter positively, each employee's load has been lightened because of more men being consistently on the job.

2. *Absenteeism.* Few will contend that the inauguration of an insurance centered health program reduces absenteeism. In fact, the present emphasis on hospitalization and surgical procedures may do much to encourage loss-time illness. The opposite has proved the case at Seamen's. Since the inauguration of the medical plan, absenteeism, which formerly averaged 7 per cent, declined to below 3 per cent.

3. *Longer Working Life.* Actuarial statistics definitely establish that Seamen's personnel enjoy a noticeably lower death rate only partially attributable to nationwide advances in medicine. As a result, premiums on group life insurance at the bank have declined to 2.7 per cent of the payroll.<sup>13</sup>

The following case illustrates the success of the Comprehensive Medical Plan in lengthening the productive life of the employee to the mutual advantage of himself and the bank:

The patient was a man in the middle fifties who had a number of strikes against him to start with: obesity, diabetes, gall stones, hardening arteries of the legs, and angina pectoris. The electrocardiogram gave additional objective evidence that the coronary blood vessels of the heart were "clogged up." The patient developed a good informal patient-doctor relationship at the Clinic in 1953. There was some improvement in his legs and feet, some reduction in weight, and a clearing up of his diabetes. But his life long enjoyment of "good food" mitigated against doing a one hundred percent job in dieting. In 1955 he experienced a coronary heart attack. He made a good recovery and was back on the job in two months. The heart attack actually resulted in further improvement in his health through closer heed and cooperation with his physicians at the Clinic. In 1958 his gall bladder was removed without complication. At present there is no active diabetes, rare twinges of angina and a general improvement in his feeling of well-being and work-day effectiveness. His attitude toward health is a positive, constructive one, not a fear-dominated one.<sup>14</sup>

<sup>13</sup>Edwin J. Grace, M.D., "Keep Your Employees Out of the Hospital," *Harvard Business Review* (September-October, 1959), p. 123.

<sup>14</sup>John J. Clark and Robert J. Clarke, "An Alternative to Group Health Insurance," *Personnel Magazine*, American Management Association (May-June, 1961), Vol. 38, No. 3, p. 64.

4. *Productivity.* The bank's management believes that marked gains in productivity have followed the inauguration of the Comprehensive Medical Plan.

A was employed as an IBM operator at the bank. A's productivity level fell almost to the minimum level required by the department. Subsequent examination at the Clinic disclosed the presence of a painful leg condition, aggravated by overweight. The leg condition was corrected surgically, and the patient put on a diet to shed the excess poundage. Improvement in health was marked and accompanied by a substantial rise in productivity. In fact, a representative of IBM inquired if a new operator had been assigned to the equipment.<sup>15</sup>

5. *Conserving Human Resources.* Management as a profession has been traditionally interested in the conservation of resources, both human and material. Through decades of experience it has gained clear notions of what sustains and enhances these resources. Its advice and support is sorely needed in resolving the issues which presently agitate the body politic on the question of medical care.

The nation's need to husband its human resources becomes in a private enterprise economy a measure of management's social responsibility. There are mounting pressures on our business leaders to take effective steps to protect the health of employees at all levels of the administrative structure. Here is a case which illustrates the vital role management in partnership with medicine can play in conserving the nation's human resources.

Mr. X, a 30 year old, male executive, developed a persistent cough with expectoration of blood. Penicillin therapy failed to improve his condition and in fact led to the appearance of resistant strains. Hospital studies, not genetically directed, indicated the immediate need to have the lung removed. Mr. X was referred by his employer to the Clinic where his condition was reappraised in the light of recent applications of genetic principles to clinical practice. Treated with combinations of antibiotics introduced directly into the lungs by the use of an aerosol mist with a detergent solvent, the patient made an uneventful recovery within ten days and without hospitalization.<sup>16</sup>

X's experience underscores the vast economic potential of group practice, especially in those instances where genetic principles are joined with multiple chemotherapeutic techniques to provide simple, safe answers to many deep-seated infections. In this case, apart from the operative risk and surgical mutilation, the cost of treatment was thirty times less expensive and an even more ominous element of psychological trauma was removed.

## CONCLUSION

Experience indicates that the survival of democratic capitalism will in large measure depend upon the genius

(Concluded on page 15)

<sup>15</sup>*Loc. cit.*

<sup>16</sup>Mr. X is not an employee of the bank. His case was accepted by the authors, however, for it typifies the quality of care available to Seamen's employees and exemplifies the medical philosophy of the Clinic.

# the MARKETING CENTER

## Mathematical Concepts For Marketing

# LINEAR PROGRAMMING

Robert W. Rosen

*To what extent can mathematical methods contribute to the solution or better understanding of business problems? Some insight into this question may be gained by exploring the potentials of linear programming, a prime example of the mathematical techniques which have been widely applied to the solutions of business problems. Specifically, this paper will attempt to answer four questions: What is linear programming? What kinds of problems can it solve? What unique advantages does it offer? What are its limitations?*

### What is linear programming?

At the most fundamental level, it is a device for selecting the optimum program or line of action from out of many alternatives. Viewed still differently, it is a technique for allocating scarce resources among interdependent or competitive ends according to some criterion to be maximized.

What kinds of allocations, or rationing problems, are found in industry and hence offer opportunities for applying linear programming (LP) techniques? The entire realm of budgeting involves such problems as, for example, the marketing manager's need to decide how much of his available money to allocate among direct selling, advertising, direct mail, and other selling devices. Within the distribution sector one might face such problems as determining the most profitable sales

mix which can be obtained from existing production facilities; or determining which factories should supply each warehouse in order to minimize the over-all cost of transportation between factories and warehouses. In the area of sales management, there is always the problem of determining the best allocation of each salesman's time among various customers, including the frequency of calls and the sequence for calling on different prospects.

### What kinds of problems does it solve?

In short, LP problems usually contain an objective to be maximized, such as profits or sales; scarce resources, such as money or time; alternative ways of dividing these resources among competitive ends; and interaction among the various activities. One may conclude, therefore, that LP can be applied to a wide range of business problems.

The mounting interest in LP techniques stems from its ability to surmount the limitations of more traditional methods, such as common sense, simultaneous equations, and differential calculus. Hence, comparisons with these three devices may help to explain the increasing interest and contribution of newer techniques like linear programming.

From a practical standpoint, common sense methods are limited to small and fairly easy business problems. Even in these cases, however, there is no systematic way of determining whether the solution derived is optimum, and in many cases it is not. Conceptually, common-sense methods often fail because variables which are interrelated are treated in isolation from each other. Such procedures are often impossible and typically inexact. Economists have long recognized the interactions among economic variables and, consequently, the neces-

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*Note: Dr. Rosen is an associate professor in the School of Business Administration at the University of South Carolina.*

sity for simultaneous methods, such as those embodied in the Law of Comparative Advantage and Walras' studies of general equilibrium. Thus, LP differs from common sense in at least four major respects. First, LP problems can be programmed on data computers so that solutions can be obtained for larger and more complex problems. Second, LP employs calculating techniques which automatically identify the optimum solution. Third, LP takes explicit account of the interrelationships among relevant variables by using simultaneous equations to arrive at the final solution. Fourth, LP techniques are oriented toward optimizing the system as a whole without regard for the welfare of any one or more parts of the problem. Indeed, LP proceeds on the uncommon assumption that optimum solutions can be achieved only if one or more parts of the problem are deliberately disadvantaged. When it is possible to optimize each activity in a system, then no LP problem exists. Such conditions are extremely rare, however, as would be the case where the most efficient machine has enough capacity to satisfy all sales requirements.

Traditional simultaneous equation methods also have limited applicability to business problems because negative numbers may appear in the solution. Such solutions might specify negative sales for a particular market region, or that the sales mix include a negative amount of a particular product. Obviously, solutions of this kind are neither practical or optimum. Traditional simultaneous equation methods are also incapable of coping with restrictions. For example, instructions from the marketing department placing a minimum or maximum range of shipments to a particular warehouse could not be incorporated into traditional simultaneous equation methods. Another characteristic of this method which is limited in applicability to business problems is that all committed resources must be employed and none may be left idle. Yet, the optimum solution to many business problems quite often leaves some resources idle. Another serious drawback is that business problems usually contain more unknowns than equations. As a result of these and other considerations, business problems frequently cannot be solved by traditional simultaneous equation methods.

Like simultaneous equations, differential calculus is not designed to cope with inequations and constraints. Moreover, where the data are linear and discontinuous, differential calculus is of limited usefulness. Thus, the three techniques discussed exhibit marked limitations when applied to business problems.

### **What unique advantages does it offer?**

Linear programming employs four devices to overcome the limitations inherent in the three techniques just discussed. Specifically, those four devices or concepts are: inequalities; constraints; slack variables; and iterations.

"Inequalities" are statements that one quantity need not equal some other quantity. For example, in a machine-loading problem, the statement "hours of work assigned to machine A may be equal to or less than the 200 hours available" is an inequality. Here, the hours of work assigned may be less than 200, thus permitting a degree of idleness, or slack, if that should be required for determining the optimum solution. Constraints are the right-hand side of inequations. In the example given, 200 hours is the constraint or restriction. Hence, the first function of inequalities is to permit some resources to remain idle if this condition is necessary to obtain an optimum, and to prevent solutions which require more resources than those available. The second function of constraints, or restrictions, is to allow management, rather than mathematics, to dictate certain requirements which must be met before a solution can be considered optimum. Thus, in designing a product to meet customers' preferences, management may specify certain requirements such as minimum or maximum boundaries of weight, length, cost, fragility, etc. In this way, the range of possible solutions is "restricted" or "constrained" to conform with the manager's specifications.

If the Simplex algorithm is to be used in calculating the optimum solution, then the inequalities referred to earlier must be converted into equations. This is done by introducing a fictitious activity, such as an imaginary product, called a "slack" variable. All resources not utilized in performing "real" activities are assigned to the "imaginary" or slack variable. Essentially, slack variables are only a mathematical device to facilitate computations requirements of the Simplex Method by converting inequalities into equations.

The last concept, "iteration," is the actual mechanics of calculating the optimum program. LP solutions are derived by systematic trial and error, each successive trial coming closer to the final solution. Each such trial is called an "iteration." The iteration process is designed to obey all the restrictions and to prevent the appearance of negative numbers in the optimum solution. There are many iterative procedures ranging from the simplest, the index number method, to the most comprehensive, the Simplex Method. Normally, the iterative process itself indicates when the optimum solution has been derived.

Summarizing briefly, LP is a mathematical technique designed to identify the best way from among many possible alternatives of optimizing some objective. Thus, LP is a device for rationing or allocating scarce resources in the most efficient or profitable manner. Perhaps the most distinguishing feature and advantage of LP is its ability to cope with restrictions.

The discussion up to this point has illustrated some of the many contributions which LP has made to im-

prove the decision making process. Like other techniques, however, LP is also subject to certain limitations.

### **What are its limitations?**

The first and most prominent limitation of LP is the requirement of linearity among the variables entering into the problem. Unless this linear relationship exists, then LP is either inapplicable or inexact. Two questions then are in order. First, what is a linear relationship? Second, to what extent are business variables related in a linear manner? Essentially, linear relationships are proportional relationships. If it takes \$1 of advertising to create \$10 worth of sales, then it would take \$5 to create \$50 worth of sales. Stated differently, marginal productivity remains constant at all levels of activity. To take one more illustration, if 100 units can be sold at a profit of \$8 per unit, then 1000 units can also be sold at a profit of \$8 per unit.

Both theoretical and empirical considerations suggest that business variables are not typically related in a linear manner. One would not expect marginal variable costs to remain constant at all levels of production, that profit margins would remain the same regardless of the volume sold, or that each added dosage of advertising would yield an equivalent return of sales or profits. Such considerations would seem to place a sharp limit on the applicability of linear programming to the solution of business problems. Before leaving the grave-site, however, prudence dictates that we examine LP's defense against these mortal charges.

A dedicated linear programmer is aware of and admits this defect—but not without a stout defense. His counterargument consists of two worthwhile points. First, a valid application of LP requires only that linearity occur in the range of normal solution, not along the entire range of relationships; and there is evidence to substantiate the existence of this point. For example, many researchers seem to find near constant marginal costs over a wide range of experienced output levels. Similarly, it is not inconceivable at all that some input-output relationships may remain fairly uniform at different levels of activity. In short, the LP'er may grant the rarity of perfect linearity but hold to the position that many situations approximate linearity closely enough to justify the assumption of strict linearity. This impasse is resolved, typically, by agreeing to the usefulness of LP—provided approximate answers are acceptable. And a reasonably approximate answer is acceptable, if not welcomed with joy, in many cases. Further rapport is established by adding the caution that the linear programmer must not assume "reasonable" linearity without prior investigation.

Unfortunately, the rose of rapport comes equipped with thorns. Specifically, there seems to be no way to measure the schedule of errors introduced into the final solution by varying degrees of departure from linearity. Thus, the amount of confidence which can be placed in

the final solution cannot be expressed quantitatively. Similarly, restricting the requirement of linearity to the "neighborhood" of the solution raises added difficulties. How does one identify the reaches of this "neighborhood" before solving the problem? As a partial assuagement of these doubts, the linear programmer closes his argument by suggesting that, however approximate the solutions might be, they are still more valid than any other practicable device available. Moreover, the LP'er notes that some progress has already been made towards adapting LP to problems containing nonlinear relationships.

Summarizing, because perfect linearity hardly ever exists, LP solutions are necessarily approximate. Unfortunately, there seems to be no way of estimating the amount of error introduced by varying degrees of departure from linearity. However, sight should not be lost of the real possibility that many of these approximate solutions may still represent considerable improvement over present practices.

A second factor limiting the applicability and usefulness of LP is its inability to cope simultaneously with plural managerial objectives. For example, LP could indicate the program which maximizes production, or profits, or utilization of facilities, or any other objective. But, LP cannot yield a solution where two or more of these objectives must be considered simultaneously. Viewed somewhat differently, the program which maximizes one objective is not the same program to maximize some other objective. This point is readily demonstrated. Using the same data and LP techniques, the optimum production schedules for two products, A and B, are as follows. The maximum profit program consists of all B units and no A units. Maximum production has the opposite program, no B's and all A's. Finally, maximum utilization falls about half way between the two previous solutions: about as many A's as B's. The ideal program might necessitate consideration of all three objectives. Linear programming, however, cannot generate such a program. Thus, two facts have been established. First, business problems typically involve consideration of several objectives; and, second, LP can optimize only one objective at a time. These considerations constitute another severe restriction on the use of LP. Two additional conclusions may be drawn from these findings. One, LP is only a sub-optimizing device because of its inability to cope with all objectives pertinent to the problem. Secondly, and as a result, LP does not replace management. Only management can decide how much weight should be given to each objective in arriving at the final solution.

A dedicated LP'er might accept all or part of these charges—but, again, not without strenuous qualifications. As a starting point, he might agree that LP can optimize only one objective at a time and that business decisions typically involve several objectives. However,

LP can show management the costs and returns associated with varying degrees of departure from some optimum program. For example, management might feel that the production program which minimizes cost would result in excessive labor turnover. LP could help management to resolve this impasse between conflicting objectives by indicating the cost increases associated with lesser degrees of labor turnover. Thus, although LP did not design the final solution, it did provide pertinent information about the costs and returns associated with alternative combinations of objectives. Here, better decisions would result because more of the vital facts were made known to management. Where more than two objectives are in conflict, which is the typical case, estimating the costs and returns from alternative combinations of objectives may be time-consuming and expensive, thus modifying LP's contribution in this area.

Conceivably, obstructions raised by conflicting objectives could be swept aside by weighing each of the different objectives. However, the difficulties here are not inconsiderable. How would one equate such diverse objectives as cost, labor turnover, speed of delivery, etc., when all might be relevant to a particular problem?

The last major limitation to be examined concerns the type of data which can be processed by LP methods. Since LP is a mathematical device, all factors pertinent to the problem must be expressible in quantitative and certain terms. Objectives, for example, must be stated unambiguously. "Profits must be increased" is not a properly stated objective for LP purposes. Rather, one must say, "Find the program which maximizes profits." Similarly, it is inadequate to state as a restriction that stockout must be kept to satisfactory levels. Rather, one must say, "stockout shall not exceed \$10,000," or "one per cent," or some similar quantitative criterion. Al-

though it may seem easy to quantify objectives or restrictions, such is really not the case. It is exceedingly difficult, for example, to estimate the true cost of stockout associated with various production or inventory schedules. Yet, if stockout, goodwill, morale, or any other factor is relevant to the problem, it must be expressed quantitatively. One can well imagine the misgivings any manager would have in trying to estimate these intangibles. Without such decisions, however, LP cannot deliver its full potential. Many managers seem to feel that quantitative estimates of the kinds just referred to are so fallible as to destroy the merits of any program based on such estimates. These considerations, in turn, have led some managers to reject LP. To this objection the LP'er has an effective counterargument. If it is necessary to include intangibles in the final analysis, wouldn't it be better to make such guesses explicit and thereby reap the benefits which LP offers? After all, if these elements are important, then the issues, however tenuous, cannot be side-stepped forever.

A more tangible limit on the type of data amenable to LP processing is the requirement of certainty. Certainty is the opposite of probability or stochastic systems. To illustrate: LP methods have not been applied very successfully to inventory problems because the stream of incoming demands tends to be irregular and uncertain. Efforts to solve this and similar problems have employed other decision making techniques like Queing or Waiting Line Theory. Unfortunately, marketing problems seem to be oversupplied with uncertainties, irregularities, nonlinearity, and plural objectives. Consequently, the final conclusion seems to be that linear programming, and other similar mathematical devices, can offer only limited assistance to the solution of marketing problems.

## INVESTMENT IN MAN

(Continued from page 11)

of our people in combining the three ingredients vital to its success—individual initiative, mutual responsibility and protection against the corroding fear of insecurity. The authors feel that the Seamen's Bank has evolved an approach to employee health programs which meets these criteria and which can do much to improve efficiency and morale in many industries. It should have special significance for small and medium-sized companies where cost considerations will always be paramount.

Health insurance is estimated to average 4 to 5 per cent of the national payroll.<sup>17</sup> The cost of the medical group's services to the bank approximates 2.7 per cent of the total payroll. The lower premiums on the major

medical and group life policies as well as the reduced rate of absenteeism, enhanced productivity, and improved morale more than offset these charges. The bank's management is convinced that, all things considered, and especially in view of the quality of medical care available to the employee, the Comprehensive Medical Plan is less costly than any comparable combination of hospitalization and major medical insurance.

While the specifics of the plan would, of course, vary from industry to industry, the Seamen's-Grace Plan offers a worthwhile alternative to proposals calling for some form of "socialized medicine" as a solution to the rising costs of private medical insurance. The plan is in the tradition of the private enterprise system relying essentially on individual initiative and voluntary co-operation—in essence, a partnership between the medical profession and industry.

<sup>17</sup>Haber and Cohen, *op. cit.*, p. 468.

# THE MANAGEMENT FORUM



## MANAGEMENT DEVELOPMENT AND GROWTH

### *a continuous process*

*What would we like the future to be?*

This is the really fundamental question for those of us who have some share in bringing along the next generation of managers. For the future is not some inevitable pattern demanding that we conform to it. The future is being made now by people like us; by the faith which our choices demonstrate and what this communicates, especially to young people in business.

Those who aspire to sound long-run futures for their businesses must see to it that more people who are potentially capable of being managers more quickly become actual, capable performers in management. If management development is to improve—if, in the future, more and better managers are to emerge from a given supply of talent than have emerged in the past—then those who will effect this change must do it largely by improving the quality of their own thinking.

Thinking must be geared to cope with such obstacles as these: acute competition for able people being graduated from college and the prospect for continued difficulty in finding the kinds of people needed in the pool of available talent; accelerated growth in company size and technology, and in demands for capital; sustained pressures from social, political, and economic conditions, both domestic and worldwide, and from competition for a better, less expensive product. The cost of inexperience in the management staff meeting these conditions will accent the need to compress the time taken for a manager to become fully competent.

For a business to have adequate assurance now that it will be able to meet those requirements in the future, something more than what is usually thought of as a

"management development program" will be required—something more than courses, replacement tables, and schedules of experience assignments, useful as these are if well done. The "something more" is a change in thinking, a better way of looking at the problem—the least expensive and the hardest to do of all innovations. When thinking is right, the actions and devices take their proper places without much difficulty.

"Right thinking" about this problem must take into account the best of our experience to date, the soundest of ethical ideals, the spiritual nature of a man as it relates to his capacity to venture and assume responsibility in the face of uncertainty, and his knowledge that is experimentally demonstrable. The latter three of these aspects are not commonly put together in approaching a practical problem like the development of business management. I simply suggest that you be aware of them as we review an outline of ideas for consideration as to what would be "right thinking" about this subject for your company at this time.

What follows is largely a distillation of the experience factor. It includes (1) some aims of management development, (2) a few ideas about the meaning of personal growth, (3) some questions we might ask to clarify our thinking, and (4) recommendations for continuing to make progress in the development of people.

### AIMS OF MANAGEMENT DEVELOPMENT

Management development is a process of growing leadership. As used in this discussion, it refers to all of the actions or influences—whether generated by the manager who is being developed, his boss, his associates, or his company—that affect what he knows and can do, how he thinks, how he works, and how he grows as a manager. Following are some of the major aims:

Note: Mr. Greenleaf is director of personnel research, American Telephone and Telegraph Company. This article is adapted from a talk given at the University of Michigan.

1. *To assure managers in required numbers and with the required skills to meet the anticipated future needs of the business.* In every company something is predictable, something can be foreseen that gives a tangible base to current management development activity.

2. *To encourage managers to grow as persons and in their capacity to handle greater responsibility of any nature.* How many of the conditions of today could have been foreseen in 1933 when many of our key managers were in the most formative period of their development? The unforeseen future will likely demand at least as much adaptation to change.

3. *To improve the performance of managers at all levels in the jobs they now hold.* One of the requirements of a sound, long-range business is that its management is seeking constantly to improve itself, its belief in what it is doing, and the ability to develop subordinates.

4. *To sustain good performance of managers throughout their careers.* If we may assume that a manager must develop somewhat merely to stay even, then part of the job of management development is to help sustain good performance of all managers even at terminal levels right up to the day they leave their company.

To some extent these are overlapping aims. But if we can accept them, then we have a basis for considering how we can do better.

### PROCESS OF PERSONAL GROWTH

The beliefs of senior managers about growth and change in their subordinates will probably determine, in the long run, how well the next generation of managers comes along.

If we define mature growth as a continuous process toward the fulfillment of what a person is uniquely capable of becoming, then the manager who helps people to grow is one who can accept the idea of each individual's becoming himself, and who makes an effective team out of such people. Growth, as viewed here, is equally available to each person in a business regardless of how far he has risen in the organization. It is seen as something more basic than striving for status.

While all people arrive at maturity with certain characteristics that are likely to stay with them, they also have great possibilities of growth and change, possibilities of moving beyond what seem to be their inherent limitations.

At the age most young people join a company (18 to 25) they are likely to be involved in a major growth crisis, to be preparing to shed their youthful self-centeredness and begin to struggle with such basic questions as: Who am I? What is my place? Where am I going? And while they are struggling with these questions, they may rattle around a bit. The expert advice is not to make too firm a judgment about the

potential of young people at this point. The safer course for the mentor of the youngster is to help him to see clearly his own current performance and behavior, to hold—and show—faith in his capacity for improvement, but to avoid judgments about his long-run development.

One of the important things a business can do to help young people resolve their own questions and get them started on a sound course of development is to surround them with a strong and compelling idealistic concept of a business that helps them find an adequate sense of purpose and set their own directions as a part of the enterprise.

Continued growth is a conscious, striving process involving increasing awareness of the self as a person in a particular environment. In this process a person's goals get clearer and more "centered" as he grows older. Beyond the matter of technical competence, which must be sought positively, the best effort a person can make for his own growth is to seek for understanding of himself in relation to other people and to his total environment. It requires a belief by each person, and by those around him, in his own unique individuality.

Growth is a risk-taking process. This is one of the first things a young person needs to learn in moving from academic to business life. He must learn that the rewards and satisfactions no longer come wholly from doing well what others lay out for him to do. Even in the lowest management positions he must learn to venture and "decide" when there isn't enough data to make a risk-free decision. The opportunity for success is always coupled with the risk of failure.

The growing person is likely to be a many-sided person with vital interests in family, job, church, community, hobbies, and recreation. As he matures, distinctions tend to become less sharp, and he finds a unity and an interrelation between all of these facets of his life.

Another growth crisis comes in the late thirties and early forties when the physical powers begin to diminish. There is the temptation (resisted by many) for those who have acquired a moderate competence to settle for the level of ability they then have. Those who yield to this temptation may continue to be interested, conscientious, and hard working, but they say, in effect, "I'm going to ride it out on the pattern of performance I now have." The error in this assumption stems from the fact that there is no such thing as a static plateau of achievement. Because changing conditions make new demands, one must make some growth effort just to hold his own. The choice seems to be either growth or decline. And it is a job for the boss and the company to see that the man is kept challenged so that the choice will be *growth* in as many cases as possible.

The final growth crisis comes as one contemplates old age. Almost everyone who completes a normal career comes to a time when he looks back and asks,

"Has this been worthwhile?" The significance to management development is twofold: (a) The individual may have some good years left. Does his answer to this question show he has sustained his interest and his drive or has he suffered a decline in spirit? (b) People tend to reflect what they feel, and the over-all judgment they make about their own careers can become a stimulating, a neutral, or a depressing influence upon the attitudes and aspirations of others. What the oldsters in a business reflect has a good deal to do with the growth of the youngsters.

Part of the answer to the question of how to sustain the spirit and drive of older people lies in the attitudes of the business toward them when they are old. But most of it depends on what was done about their growth (by them and by others) in the period from ages forty to fifty. A man who lost the experience of challenge in his work at forty is probably not a good candidate to regain it at sixty.

The responsibility for personal growth of an individual is shared by all who have some influence upon him, though particularly, of course, it belongs to the individual himself. The company and his boss should encourage him to use wisely all of the resources of the company, and keep constantly before him a picture of his contribution to the organization as a stimulating, challenging, and even an exciting prospect.

This view of personal growth, admittedly sketchy and built upon scattered fragments of data, has been stated deliberately in somewhat idealistic terms. It is suggested as a possible concept to move toward—never to achieve fully—because the chances are that as one starts to move toward such a concept, the concept itself will have moved along.

## PROCEDURE FOR COMPANY DEVELOPMENT

The first real step toward "right thinking" is asking the right questions, clearing the air somewhat for the discussion of these questions out of which may emerge a higher level of certainty about action to be taken. This may sound like an overly-philosophical approach. But let us not forget that we are dealing with an important aspect of human development. Thoughtful men have been preoccupied about this matter since the beginning of recorded history, yet there is very little dependable codified knowledge available about it. What we have to work with here is better described as "wisdom," the stuff that men of experience make of their own experience by examining it critically and asking the searching questions—the kinds of questions that have no easy answers.

### Some Searching Questions

The following are a few questions of the kinds that need to be asked and a brief comment about each:

1. *Is my business getting the people it needs and wants?*

What the person brings with him in the form of intelligence, knowledge, integrity, drives, attitudes, emotional stability, and health have a determining influence on subsequent development. The access which any company has to those high in development potential rests on two questions:

a. Is the company attractive to people it would like to hire? Do they see the business as offering challenge and opportunity?

b. Is the selection process discriminating enough to bring in those best suited and to reject the others? Are those who clearly will not prosper in the company separated early in their careers, both for their own good and for the good of the business?

2. *Are we using effectively the early formative years of promising young people?*

If a person is to develop in management, it is important that, as quickly as adequate preparation will permit, he get into a job that requires management decisions or the direction of people, preferably both.

3. *Do our people assume responsibility for their own growth?*

Some young men seem content, upon entering business, to wait passively while their company develops them. Each man's boss should seek to bring this responsibility home to the man early in his career by clarifying and broadening his concept of his job and its opportunities, by helping him to learn the signals of successful and unsuccessful performance, and by helping him to become experimental. In addition, some men may need to talk from time to time with someone especially prepared to give counsel on personal growth.

4. *Are we realistic about what teaching the knowledge and skills of management requires?*

Experience is indispensable but not necessarily a good teacher. Although new knowledge is displacing old knowledge more rapidly and there is more untested pseudo-knowledge floating around in management than in older vocations, training can be given by anybody who knows and can teach. However, it is important to make sure that an arbitrary and limiting "style" is not imposed.

5. *Are we using the search for new knowledge (an indispensable condition of a sound organization) effectively in the development of managers?*

Participation in a formal study of, or research on, some vital aspect of the business, done at the right time in a man's career, is one of the surest ways to help a man grow in management stature and to develop his perspective and analytical capacity, particularly if it gives him a broad look at his business. And he may learn to listen to how people feel deep down inside.

6. *What are the attitudes of the senior managers toward growth and change in people?*

In the long run, the effectiveness of an organization in developing people will depend largely upon what the senior managers believe about growth and change in people. If they do not have a sound point of view about growth, some promising talent will be either misguided or lost and some development opportunities will be wasted on unpromising people.

7. *Are the bosses of managers using work experience effectively for development?*

People learn most about management by managing and by the way they are managed. A man may learn much from working for several bosses early in his career and studying the contrasts and similarities in their ways of managing. The boss should have a program of things for his subordinates to learn

and do with real situations in which mistakes are made and where there is accountability for mistakes. To the extent that the boss knows, he should let the man know what he is doing well and correct the things he is doing poorly. The development process can be helped if some thought is given to selecting the "right" boss for the manager needing development.

8. *Are the available incentives supporting the best possible management development?*

Incentives are the influences that appeal to us and guide our efforts. They may be either positive or negative, approval or disapproval; intangible, such as recognition, criticism; or tangible, such as the giving or withholding of money, or the job itself.

Incentives can get twisted and even operate negatively. It is not safe to assume that they are having the intended effect on the growth of managers. Ideally, incentives put the force of conviction behind the words that tell the organization about its goals and values.

9. *Do we judge performance in management adequately?*

To develop to his best, every manager should be judged by comprehensive standards. This simply means that everything that ought to be considered in judging performance is considered. The people who are judging a man's work should understand and apply broad standards. A young man who, by statistical measures, is giving mediocre performance on a first line job may have the potential to become a top executive. The man next to him, judged similarly, may be giving top performance and yet may be at his ceiling. If the available talent is to develop to the fullest, judgment of management performance needs to be discerning and accurate.

10. *Do our people have the "breathing space" to do the things that develop abilities?*

To develop managers an organization must have enough people, enough resources, and enough flexibility to do the right things with the right people at the right times. Although the best operating organization is probably always a little bit undermanned, it has sufficient people set aside to work on special projects and broadly developmental programs. It is able, therefore, to relieve a good man in an operating position promptly when an ideal growth opportunity presents itself for that man elsewhere.

Managers should be watched and helped to organize their own time to permit doing the job at hand in a way that is developmental.

11. *Is there someone available for the manager to talk to?*

People who are growing in management competence need a listener, and the person who listens needs to understand. Ideally, the boss is the man to talk to. But the boss may not be a good listener, and maybe it's the boss that the man wants to talk about. A company can develop the climate in which the importance of a person talking out his problems is recognized. And it can accept, as a natural development, that some people in management will be especially sought because they are good listeners.

12. *Are we using opportunities outside the business effectively in developing managers?*

Part of the opportunity to develop a man lies outside a company in inter-business groups, community affairs, and courses aimed directly at broadening. The boss ought to make sure that the man sees the importance of such opportunities to himself.

13. *Is the work organized so as to aid development?*

The work should be broad enough in scope that a man can feel responsible for results and have the satisfaction of achievement when he is successful.

14. *Are we making work sufficiently challenging?*

What a man needs to grow in management stature seems to be individual and personal. The resources of the business should be used to keep a feeling of challenge and opportunity ahead of each man to the maximum extent possible. The growth of the capacity to carry important responsibility is learned by carrying responsibility. One of the ways a boss can keep a man challenged is to encourage his search for knowledge outside the range of his immediate job. *If every boss has—and communicates—a strong feeling of total responsibility for his business, much valuable management development will take place from this alone.*

The man with potential for development in management should have a feeling of personal significance in running a business. The issue has never been more clearly stated than in the old story of the two stonemasons. When asked about their work, one replied, "I'm setting stone"; the other, "I'm building a cathedral."

15. *Are the goals of the company adequate to encourage managers to grow?*

The growth of a man is largely the product of effort and purpose coupled with a developing spontaneity. He is more likely to emerge in his mature years as a manager capable of carrying heavy responsibility if his own purposes are formulated early within the framework of company goals that encourage the best in him to develop and that recognize he in turn will influence the future goals of the company. People at all levels of a business contribute to goals and objectives by what they think and how they act.

The substance of the company's current goals must carry impact. The man must see and hear these goals expressed often enough, clearly enough, forcefully enough, and early enough so that he can understand and believe them. Nothing much happens without a dream. This is the way all human institutions get started; and the revitalization process that keeps an institution alive appears to be the same kind of thing.

The answers to these fifteen questions should provide some basis for specific actions to improve management development in a company. They suggest the breadth of thinking required if the resources of a company are to be fully and effectively used in the development of its people.

## Plan Specific Action

For a business that sees its future achievement partly in terms of developing more and better managers in a minimum period of time, five major areas of action are suggested:

1. *Clarify senior manager understanding.*

This paper has undertaken to summarize a statement of the problem, a set of aims, a point of view about the question of growth after maturity, and some basic questions to guide our thinking. The senior manager who is going to do better in bringing along his subordinates should have a clear idea of his own, consistent with basic company policy on all of these points.

2. *Supply adequate staff support.*

There are two major staff fields: (a) to assist the bosses of young potential managers to watch closely the development of their subordinates, and (b) to research, to advise, and to teach the senior managers in order to support the best possible performance by them in developing their subordinates.

*(Continued on page 24)*

# SOUTHEASTERN CORNER

## CONSUMER EXPENDITURES AND SHIFTS IN PRODUCTION

In the last issue of the *Review* the writer discussed in a general way shifts in consumer expenditures among various types of goods and services, and pointed to the general classes of consumer goods which comprise a greater or less proportion of total manufacturing in the Southeast than in the nation as a whole.<sup>1</sup>

The focus of the present article is on the differences in types of consumer goods manufactured in the various southeastern states, and the differences in the way these states are affected by the shifts in consumption expenditures indicated in the earlier article. In practically all of the southeastern states consumer-oriented manufacturing in 1958 was larger in proportion to the total than in the nation as a whole. It is, insofar as possible, consumer-oriented manufacture to which these articles are addressed.

The southeastern states vary a great deal in regard to the importance of selected types of consumer-oriented goods in their respective manufacturing economies. For example, the per cent of total value added by manufacture in 1958 contributed by food varied from a low of 5.4 per cent in South Carolina to a high of 23.0 per cent in Florida. Similarly, the per cent of total value added attributable to apparel ranged from 2.2 per cent in Florida to 11.6 per cent in Mississippi, and the share of value added contributed by petroleum products ranged from zero in North and South Carolina to 14.5 per cent in Louisiana.

<sup>1</sup>In the earlier article it was shown that, in terms of share of total consumer budget, there has been a shift from total goods to services. Within the goods component of expenditures, nondurables' share has declined while the share of expenditures for durable goods has increased. Practically all of the decline in nondurables has been attributed to food and alcoholic beverages and a smaller part to clothing. Petroleum production's share has increased markedly. Within the durable goods component, of the two major items, automobiles and parts increased slightly their share and furniture and household equipment decreased slightly.



### "Importer" and "Exporter" States

A useful analytical device is to divide states into groups according to whether they are "importers" or "exporters." (A given state is considered as a "net importer" from other states of a given type of product if the ratio of its per cent of value added by manufacture in that industry to that of the nation is less than one; it is considered as a "net exporter" to other states if the ratio is greater than one.) By this method of analysis, it may be seen that most of the eight states are net exporters of the types of goods which have been declining relative to total consumer expenditures nationally, and they are net importers of goods which have been increasing in the same sense (Table 1).

There is a great deal of difference, however, in the composition of imports and exports among the states, as indicated by Table 2. For example, Alabama imports from other areas of the United States four of the five classes of products listed, the exception being apparel and related products, while Georgia imports only petro-

TABLE 1  
NUMBER OF SOUTHEASTERN STATES  
"IMPORTING" AND "EXPORTING" SELECTED  
TYPES OF PRODUCTS, 1958

	Change from 1949—1960 in Share of Consumer Expenditures*	Imported in X States	Exported in X States	Neither Net Imported nor Exported in X States
Food & Alcoholic Bev.	(—)	3	4	1
Clothing	(—)	3	5	0
Furn. & Fixt.	(—)	3	5	0
Autos & Parts*	(+)	7	1	0
Gas & Oil <sup>b</sup>	(+)	7	1	0

\*A positive sign means that the share of national consumer expenditures for the indicated type of goods increased from 1949 to 1960; a negative sign denotes a decrease.

<sup>a</sup>Data on production include all transportation equipment, not only automobiles and parts.

<sup>b</sup>Data on production include all manufactured petroleum and coal products, not only gasoline and oil.

Source: Computed from *Survey of Current Business*, and *Census of Manufacture*, 1958.

leum products and exports all of the others. Similarly, Mississippi exports all except petroleum; North Carolina imports all but furniture and fixtures; South Carolina imports all but apparel and related products; and Tennessee imports petroleum products and transportation equipment and exports apparel and furniture and fixtures, the same as the Southeast as a whole. Both Florida and Louisiana are net importers of three of the

five classes of products and exporters of two. Most of the net exports of all eight states are products the demand for which is declining relative to national total consumer demand. Conversely, most of the imports are products the demand for which is increasing relative to total demand. This suggests a somewhat gloomy implication for the economies of the states cited, although this is not the whole story.

It should be pointed out that the types of products classed as "exports" in the different states are products which have been oriented to or linked with the natural resources or the abundant labor supplies of these states while those classed as "imports" are generally oriented more to the region's markets. In the past, particularly prior to the Second World War, the southeastern states had limited markets and this influenced the pattern of production. The major types of manufacturing industries which developed here were, as suggested, those which could take advantage of the region's physical and human resources, and these turned out to be chiefly textiles and lumber. These types of goods were largely exported from the region to other parts of the nation and, on the other hand, the market-oriented goods were imported.

An optimistic note, however, is that the Southeast in general is a region of rapidly expanding markets as incomes continue to rise, and this can be expected to lead to continued shifts in patterns of production to meet the growing and changing demands within the region itself. As markets in the region continue to grow there will be continued shifts in relative importance from industries producing in the region mainly for outside markets to industries producing for markets within the region. Hence, the Southeast should become less dependent upon other regions for the manufactured products consumed here.

Roger L. Burford

TABLE 2  
SELECTED "IMPORTS" AND "EXPORTS"  
OF EIGHT SOUTHEASTERN STATES, 1958

	Net Importer of	Net Exporter of
Southeast	Petroleum Products <sup>b</sup> (+) Transportation Equip. <sup>a</sup> (+)	Apparel (—) Furniture and Fixt. (—)
Alabama	Food Products (—) Petroleum Prods. <sup>b</sup> (+) Transport. Equip. <sup>a</sup> (+) Furniture and Fixt. (—)	Apparel (—)
Florida	Apparel (—) Petroleum Prods. <sup>b</sup> (+) Transport. Equip. <sup>a</sup> (+)	Food Prods. (—) Furniture and Fixt. (—)
Georgia	Petroleum Prods. <sup>b</sup> (+)	Food Prods. (—) Apparel (—) Transport. Equip. <sup>a</sup> (+) Furniture and Fixt. (—)
Louisiana	Apparel (—) Transport. Equip. <sup>a</sup> (+) Furniture and Fixt. (—)	Food Prods. (—) Petroleum Prods. <sup>b</sup> (+)
Mississippi	Petroleum Prods. <sup>b</sup> (+)	Food Prods. (—) Apparel (—) Furniture and Fixt. (—)
North Carolina	Food Prods. (—) Apparel (—) Petroleum Prods. <sup>b</sup> (+) Transport. Equip. <sup>a</sup> (+)	Furniture and Fixt. (—)
South Carolina	Food Prods. (—) Petroleum Prods. <sup>b</sup> (+) Transport. Equip. <sup>a</sup> (+) Furniture and Fixt. (—)	Apparel (—)
Tennessee	Petroleum Prods. <sup>b</sup> (+) Transport. Equip. <sup>a</sup> (+)	Apparel (—) Furniture and Fixt. (—)

Note: See footnotes and source note to Table 1.

# April 1961

## ATLANTA AREA ECONOMIC INDICATORS

	April '61	March '61	% Change	April '60	% Change	% change 4 months '61 over 4 months '60
<b>EMPLOYMENT</b>						
Job Insurance (Unemployment)						
Payments	\$737,864	\$1,082,109	-31.8	\$371,550	+98.6	+101.2
Job Insurance Claimants	11,075	13,236	-16.3	7148	+54.9	+62.4*
Total Non-Ag. Employment	362,200	359,250r	+0.8	369,900r	-2.1	-1.4*
Manufacturing Employment	80,350	79,300	+1.3	87,300r	-8.0	-7.5*
Average Weekly Earnings,						
Factory Workers	\$80.94	\$80.77r	+0.2	\$79.97	+1.2	+2.7*
Average Weekly Hours,						
Factory Workers	39.1	39.4r	-0.8	39.2	-0.3	+2.0*
Index of Help Wanted Ads (Seasonally adjusted, 1947-49 Avg.—100)	120.4	124.7	-3.4	159.3	-24.4	-24.4
<b>CONSTRUCTION</b>						
Number of Building Permits§	912	1028	-11.3	843	+8.2	+22.4
Value of Building Permits§	\$6,448,233	\$6,858,908	-6.0	\$8,003,123	-19.4	-5.1
Employees	22,200	21,450r	+3.5	22,150r	+0.2	+5.6*
<b>FINANCIAL†</b>						
Bank Debits (Millions)	\$1,965.8	\$2,225.5	-11.7	\$2026.1	-3.0	+1.4
Bank Deposits (Millions)	\$1,366.6	\$1,347.2	+1.4	\$1250.1	+9.3	+8.7*
<b>OTHER</b>						
Department Store Sales Index	174	160	+8.8	180	-3.3	-4.1‡
Retail Food Price Index	117.0	117.4	-0.3	116.8	+0.2	+2.2**
Number of Telephones in Service	387,151	385,827	+0.3	368,683	+5.0	+5.4**

r—Revised

§City of Atlanta only

\*Average month

\*\*End of period

†—Based on retail dollar amounts  
‡Data from members of the Federal Reserve System only

Sources: All data on employment, unemployment, hours, and earnings: Employment Security Agency, Georgia Department of Labor; Number Help Wanted Ads: Atlanta Newspapers, Inc.; Building permits data: Office of the Building Inspector, Atlanta, Georgia; Financial data: Board of Governors, Federal Reserve System; Retail Food Price Index: U. S. Department of Labor; Department Store Sales Index: Federal Reserve Bank of Atlanta and Board of Governors, Federal Reserve System; Telephones in Service: Southern Bell Telephone and Telegraph Company.

# ATLANTA BUSINESS ACTIVITY

April indicators at last have made official what Atlantans have known for some months now; the Atlanta economy is definitely in an upswing.

For the first time since December 1960, *manufacturing employment* turned upward in April gaining some 1,050 workers over the previous month. Eight hundred of these were in transportation equipment alone, as the auto assembly plants resumed production after their inventory adjustments.

Over-all *nonagricultural employment* also turned upward in April for the first time since December 1960. This makes the first four months total for 1961 only about 1 per cent under the same period last year. Contributing to this was *employment in construction* which gained in April for the second straight month. On the whole, workers in construction during 1961 outnumber last year's total by about 6 per cent. Most of this gain is accounted for by increases in general building and special trades. This can be seen in the *number of building permits* issued by the City of Atlanta. They are running about 22 per cent above last year even though the *value of building permits* is slightly off last year's mark.

Less encouragement is seen in April's index of *help wanted ads*. While the actual number of ads increased over March, when seasonally adjusted the index continued its downward drift begun last July. This indicator is regarded as a good barometer of labor demand in the area, but in this case it could have any of several meanings. It could be that, due to the high level of unemployment that has prevailed, little advertising is necessary to secure qualified labor. Or, unhappily, it could mean that the labor demand is actually slackening again.

*Job insurance payments*, which set an all-time record of \$1,082,109 in March, dropped to \$737,864 in April. This is still almost double the figure for April a year ago but is showing improvement for 1961.

*Bank debits* for April indicated that spending in the Atlanta Area dropped unusually low (11.7 per cent), even though April is usually a low month following brisk pre-Easter activity in March.

The Georgia State Employment Service announced this month the construction of a building to house new personnel in the U. S. Internal Revenue Service. The building, a Regional Computer Center, will house about 1,200 employees by fall of 1962. Currently about 50 are employed and are working in a temporary office.

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RETURN POSTAGE GUARANTEED

SECOND-CLASS POSTAGE PAID

AT ATLANTA, GEORGIA

### MANAGEMENT DEVELOPMENT AND GROWTH

(Continued from page 19)

#### 3. *Provide effective formal classroom training for management where needed.*

The company with a training class program should be aware of these four danger signs: (a) the pressure to do the pleasant and the popular, (b) the tendency with repetition for all things to crystallize and become static, (c) the illusion, on the part of either the trainee or his boss, that his development needs are fully cared for by formal training, (d) the failure of the boss to make clear what he expects to result from the training and to demand an accounting as to how his man performed in training.

#### 4. *Follow less tradition and more theory and experiment.*

This means simply that in the area of how our businesses are managed we must—to a greater extent—extract and formulate principles from experience and research, explicitly test these principles in action, refine or modify them as the testing indicates, put them into practice again, and keep this process going to maintain a dynamic and growing business.

#### 5. *State compelling company goals.*

We live in a business dominated society. The cumulative effect of the decisions of businessmen and business managers probably has more to do with shaping the character of our society than any other force. Recognition of this fact among the senior managers of a business, both implicitly and explicitly, will be a powerful force in encouraging managers to become all they are capable of becoming. Because it occupies more of the waking hours than any other activity, work can be a positive and constructive influence in the significance of a life.

Business can contribute increasingly to the growth of knowledge—once the exclusive domain of universities. The business institution of the mid-twentieth century needs a view of itself that is both practical and visionary, both prudent and daringly experimental. This is the difficult razor's edge of balance of motive and action that is crucial in setting the sights for the next generation of management.

Continued progress in management development depends upon improving awareness and performance in all five of these areas. The big question is, "How much improvement, and how fast?"

None of the data needed to answer this question are very firm. We do not know whether the supply of people who will make good managers, available to any one employer from the total national manpower resources, will be scarcer or more plentiful in the future. The people who are studying it guess—"scarcer."

Whether continued technological development will make the management job of the future more or less difficult is problematical, but the demand for technical knowledge in many management jobs will likely be greater.

How much improvement should we make and how fast should we make it? Looking into the future never gives us a clear answer on a question like this. The answer depends on what kind of a feeling of challenge the older people in management have about the younger people and whether it prompts the oldsters to be experimental and venturesome about the development of their understudies. The ultimate judgment on the career of every manager will include the answer to the question: how well did you do with the people, especially the talented people, whose growth you had a chance to influence?

